5

10

A COMPUTER SYSTEM WITH TWO HEAPS IN CONTIGUOUS STORAGE

ABSTRACT

A computer system provides an object-based environment. The computer system includes storage. A contiguous linear portion of the storage is logically divided into first and second heaps located at opposite ends of the linear portion of storage. Any gap between the two heaps represents an unallocated region of storage. The system permits references from objects on the first heap to objects on the second heap and vice versa. A garbage collector operates across both heaps to remove objects that are no longer live. Means are provided for expanding the first and second heaps into the unallocated region. The first heap is expanded according to a first expansion policy, and the second heap is expanded according to a second expansion policy.